# CHANGES TO THE NEW HAMPSHIRE ENERGY CODES

On March 14, 2002, House Bill 285 was signed into law. This legislation created a NH statewide building code. As part of this new building code, the NH Energy Code became the IECC 2000. Most things about the new IECC 2000 Energy Code are similar to the MEC 95 code that has been in place since 1999. The following is a description of the changes to the Energy Code.

- New Application(s). There is now a separate application for New Construction and for Additions, Sunroom Additions, and Renovations Go to <a href="https://www.puc.state.nh.us">www.puc.state.nh.us</a> and click on energy codes to download the new applications.
- New Software Rescheck There is a new, free, user friendly software package which shows compliance with the Energy Code. You may download it via the PUC Energy Codes page. Go to <a href="www.puc.state.nh.us">www.puc.state.nh.us</a> and click on energy codes to download the software. You should end up with the NH Specific Rescheck Software Package. When you get to the 'Download ResCheck' page, make sure to click on New Hampshire to get the NH specific software.
- Old software no longer valid. As of January 1, 2004 We can no longer accept applications which use NHCHeck or MECCheck Software..
- Rescheck Area-calc module This tool will help you to determine the areas of windows, doors, walls and floors. You can access it from Rescheck by clicking on tools. Not only can you calculate and transfer building component specs, if you use the same components such as windows, doors or heating systems, you can save them in a library for future use.
- <u>Architect and Engineer Certification</u> In addition to the requirements for a certification letter, published on the PUC websites, professional certification shall include a statement of the method used to determine compliance with the energy code.

### **NEW CONSTRUCTION**

- <u>Performance Packages</u> We found that our old performance packages often did not meet the code. These packages have been reworked to meet the code. The changes in the performance packages represent bringing them up to code, NOT an increase in efficiency between the old code and the new code. If you are using ResCheck to comply, you will find little or no change between the old code and the new code
- <u>+ Performance Packages</u>. These higher efficiency packages represent improved envelope efficiency of approximately 15%.
- <u>Performance Packages Ceiling R- Values</u> There is only one listing for ceiling R value. This includes both flat and sloped ceilings. If you want to list different r-values for different ceilings you may still do so using the RESCHECK Software approach
- <u>Insulation of Domestic Hot Water pipes</u> All domestic hot water pipes flowing through unconditioned space shall be insulated to a minimum of R-3.

#### <u>ADDITIONS, SUNROOM ADDITIONS AND RENOVATIONS</u>

## New Separate Application for Additions, sunroom additions and renovations

There are three addition package for additions of up to 40% Glazing, and up to 500 Square feet.

## **Different Calculation of Glazing Percentages for Additions and Sunroom Additions.**

You must find the glazing percentage for an addition, but it is calculated as a ratio of the **Window Area to the Wall plus Ceiling area.** 

<u>Sunroom Additions</u> This is a new category of additions which have greater than 40% Glazing ratio. In addition to the performance packages listed for Sunroom Additions, they must meet the following specifications as well:

- Maximum floor area of 500 Square feet.
- Must maintain thermal isolation from the rest of the house. (this means that a sunroom addition must be separated from a house by insulated walls, doors and windows.)
- Must have a separate heating system or zone with the thermostat in the conditioned sunroom. (This allows the occupant to isolate the room from the rest of the house and chose to heat or not heat that room)
- May not be used for a kitchen or sleeping room.

<u>Renovations or repairs to a building</u> "Shall conform to the provisions of this code as they relate to new construction without requiring the unaltered portions of the existing system to comply with all of the requirements of this code."

This means, if you touch it, you bring it up to code. For renovations, the IECC2000 requirements are:

•	Maximum window	U35
•	Ceiling insulation	R- 49
•	Wall Insulation	R- 21
•	Floor Insulation	R- 21
•	Basement wall insulation	R- 11
•	Slab Insulation 4' down	R- 13

#### Exceptions to this include:

- New storm windows installed over existing windows or doors.
- Glass only replacement in an existing sash or frame.
- Existing ceiling, wall or floor cavities exposed during construction provided these cavities are filled with insulation.
- Construction where the existing roof, wall or floor cavity is not exposed.

Questions on the code and technical support for the ResCheck Software can be found at energycodes@puc.state.nh.us or by calling 603-271-6306

#### ONLINE COMPLIANCE

We are currently beta testing an online compliance option. Oncline compliance offers you the option to submit information showing that a structure meets the energy code via the internet rather than by mail or in person.

### We Welcome Your Participation. To use this option, you need the following:

- **Rescheck Software** completed for the project and saved as an '.rck' file. To download this software go to <a href="https://www.puc.state.nh.us">www.puc.state.nh.us</a> and click on energy codes.
- Area Calc Module '.acx' file. To complete this module access it through rescheck software tools and save as a separate '.acx file'.
- An electronic copy of your plan. This may be a scanned in plan saved with a standard format such as .jpg,m .tif, or .gif. Other formats will be accepted if reader is available. Please call 271-6306 for information.

If you can supply the information listed above, (if you cannot provide all of the above information, see option 2 below) then point your browser to:

http://www.puc.state.nh.us/energycode/startapp.aspx

### under option 1.

- Click on request password, an epmail form will pop up.
- Enter your name and return the form.
- Your password will be e-mailed to you.
- Once you have a password, go back to the link above,
- Click on log in, enter e-mail address and password,
- Complete the online application, which contains the same information as the paper application.
- On page 5 of the online compliance module, attach Rescheck '.rck' and areacacle '.acx' files and your plan.
- Click **Submit Online**.
- Your plans will be reviewed, approved and returned by mail.

Option 2. enter Data Online, Submit compliance and plans by mail.

If you cannot attach all the needed information for Option 1. You may enter data for a structure online and mail follow up materials including plans, or compliance data to the PUC Energy Codes office. To do this go to: <a href="http://www.puc.state.nh.us/energycode/startapp.aspx">http://www.puc.state.nh.us/energycode/startapp.aspx</a> and click on 'continue to page on of this application' Mail remaining materials to the NH Public Utilities Commission.